

# Comparisons of Job Characteristics

**Focus Occupation:** [Aerospace Engineering and Operations Technicians \(17-3021\)](#)

**Associated Occupation:** [Aircraft Mechanics and Service Technicians \(49-3011\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 71

**Focus Occupation:** Aerospace Engineering and Operations Technicians (17-3021)

**Associated Occupation:** Aircraft Mechanics and Service Technicians (49-3011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mechanical	6.8	22.8	17.3	<<	Extensive education and/or training may be required
Design	5.2	13.5	12.2	<	Expanded education and/or training may be required
Engineering and Technology	5.7	12.3	23.6	>>	Current knowledge level is likely more than sufficient
Physics	4.3	10.9	9.7	<	Expanded education and/or training may be required
Chemistry	4.8	10.6	3.6	<<	Extensive education and/or training may be required
Transportation	4.6	9.8	4.9	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 59

**Focus Occupation:** Aerospace Engineering and Operations Technicians (17-3021)

**Associated Occupation:** Aircraft Mechanics and Service Technicians (49-3011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Equipment Maintenance	3.5	17.2	8.9	<<	Extensive development of skills in this area may be required
Repairing	3.4	15.9	7.2	<<	Extensive development of skills in this area may be required
Troubleshooting	4.5	13.9	9.2	<<	Extensive development of skills in this area may be required
Operation Monitoring	6.6	13.5	11.0	<	A higher skill level may be required

Quality Control Analysis	5.9	12.8	11.1	<	A higher skill level may be required
Equipment Selection	3.3	9.1	6.1	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 79			
Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021) Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Finger Dexterity	7.6	14.8	8.3	<<	Extensive improvement in abilities may be required
Control Precision	6.6	14.4	6.6	<<	Extensive improvement in abilities may be required
Problem Sensitivity	11.1	14.4	13.6	0	Current ability level may be sufficient
Manual Dexterity	6.5	13.9	7.3	<<	Extensive improvement in abilities may be required
Information Ordering	9.9	12.8	11.6	<	Some improvement in abilities may be required
Arm-Hand Steadiness	6.8	12.2	7.6	<<	Extensive improvement in abilities may be required
Flexibility of Closure	7.8	11.1	9.6	<	Some improvement in abilities may be required
Perceptual Speed	7.4	10.7	8.6	<	Some improvement in abilities may be required
Visual Color Discrimination	6.4	10.7	8.7	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 79
Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021) Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)		
Work Activities	Exclusivity of Activity	
Read blueprints	10	
Read schematics	34	
Read technical drawings	7	
Repair or replace electrical wiring, circuits, fixtures, or equipment	49	
Understand service or repair manuals	40	
Understand technical operating, service or repair manuals	6	
Use aviation electronics	95	
Use electrical or electronic test devices or equipment	40	

Use hand or power tools	2
Use knowledge of metric system	39
Use precision measuring tools or equipment	17

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 85

**Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021)**

**Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)**

Tools and Technologies	Exclusivity
Business function specific software	1
Computers	1
Cutting and crimping and punching tools	3
Drafting supplies	9
Electrical measuring and testing equipment	7
Fastener setting tools	12
Forming tools	2
Holding and clamping tools	3
Indicating and recording instruments	2
Industry specific software	1
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Marking tools	11
Measuring and layout tools	3
Metals and metallurgy and structural materials testing instruments	15
Non destructive examination equipment	13
Pneumatic tools	8
Power tools	2
Pressure measuring and control instruments	10
Respiratory protection	6
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Temperature and heat measuring instruments	6
Tool attachments and accessories	12
Viewing and observing instruments and accessories	4
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.